

**Session: 8:30 – 9:15**

8:30 - 8:35 **Opening remarks**

8:35 - 9:15 **Best Paper – Multi-Criteria Mesh Partitioning for an Explicit Temporal Adaptive Task-Distributed Finite-Volume Solver**

Alice Lasserre, Jean-Marie Couteyen-Carpaye, Abdou Guermouche and Raymond Namyst

**Session: 9:15 – 10:30**

9:15 – 9:40 **Graph Computing on Long Vector Architectures (Yes, it works!)**

Pablo Vizcaino, Jesus Labarta and Filippo Mantovani

9:40 – 10:05 **Integration of Modern HPC Performance Tools in Vlasiator for Exascale Analysis and Optimization**

Camille Coti, Yann Pfau-Kempf, Markus Battarbee, Urs Ganse, Sameer Shende, Kevin Huck, Jordi Rodriquez, Leo Kotipalo, Jennifer Faj, Ivy Peng, Allen D. Malony, Stefano Markidis, Minna Palmroth and Jeremy J. Williams

10:05 – 10:30 **Performance portability of generated cardiac simulation kernels through automatic dimensioning and load balancing on heterogeneous nodes**

Vincent Alba, Olivier Aumage, Denis Barthou, Raphael Colin, Marie-Christine Counilh, Stephane Genaud, Amina Guermouche, Vincent Loechner and Arun Thangamani

**10:30 – 11:00 Coffee Break**

**Session: 11:00 – 12:15**

11:00 – 11:25 **A Parallel Workflow for Polar Sea-Ice Classification using Auto-labeling of Sentinel-2 Imagery**

Jurdana Masuma Iqrah, Wei Wang, Hongjie Xie and Sushil Prasad

11:25 – 11:50 **Automated Calibration of Parallel and Distributed Computing Simulators: A Case Study**

Jesse McDonald, Maximilian Horzela, Frédéric Suter and Henri Casanova

11:50 – 12:15 **Pretraining Billion-scale Geospatial Foundational Models on Frontier**

Aristeidis Tsaris, Philipe Dias, Abhishek Potnis, Junqi Yin, Feiyi Wang and Dalton Lunga

**12:15 – 13:30 Lunch Break**

**Session: 13:30 – 14:25**

13:30 – 13:55 **Scaling Ensembles of Data-Intensive Quantum Chemical Calculations for Millions of Molecules**

Kshitij Mehta, Massimiliano Lupo Pasini, Stephan Irle, Pilsun Yoo, Frédéric Suter, Dmitry Ganyushin and Scott Klasky

13:55 – 14:20 ***Accelerating Quantum Light-Matter Dynamics on Graphics Processing Units***  
Taufeq Mohammed Razakh, Thomas Linker, Ye Luo, Rajiv K. Kalia, Ken-ichi Nomura,  
Priya Vashishta and Aiichiro Nakano

14:20 – 14:25 ***Closing remarks***